

1     **IN THE SPECIFICATION**

2             At page 38, please replace the paragraph beginning at line 1 with the following amended  
3 paragraph:

4             Subsequent to amplification by gain amplification adjustment circuit 615 and the  
5 frequency compensation by frequency compensation amplification adjustment circuit 635, the  
6 conditioned red, green, and blue components of the video signals are transmitted to video switch  
7 314. Thereafter, video switch 314 determines whether to transmit the video signals received  
8 from tuning circuit 304 (i.e., the video signals received from one of the remote computers 118) or  
9 the video signals received from option menu circuit 318 to video amplifier 316. Finally, the  
10 amplified video signals are transmitted via port 312 for display on video monitor 104.

11  
12             At page 41, please replace the paragraph beginning at line 22 with the following amended  
13 paragraph:

14             CIM 116 interfaces video port 412, keyboard port 414 and cursor control device port 416  
15 of remote computer 118 to MSU 112 via CAT 5 cable ~~[[418]]~~419 and port 400. CIM 116  
16 transmits video signals uni-directionally from remote computer 118 to MSU 112. However, as  
17 discussed previously, keyboard and cursor control device signals may be transmitted  
18 bi-directionally between remote computer 118 and MSU 112.

1           At page 42, please replace the paragraph beginning at line 6 with the following amended  
2 paragraph:

3           During operation, video signals are transmitted from video port 412 of remote computer  
4 118 to port 400 of CIM 116 via cable ~~[[418]]~~419. From port 400, the unidirectional video  
5 signals are transmitted to video driver 404, which converts the standard red, green and blue video  
6 signals to a differential signal for transmission through port 402 to MSU 112 via cable 114. Each  
7 color signal is transmitted via its own twisted pair of wires contained within cable 114 (when  
8 transmitted from CIM 116 to MSU 112) or cable 110 (when transmitted from MSU 112 to UST  
9 108)(FIG. 1). Furthermore, video driver 404 appends the horizontal and vertical synchronization  
10 signals to one of the red, green or blue video signals to allow all five components of the video  
11 signals to be transmitted via only three twisted pair of wires of cables 110 or 114. That is, the  
12 horizontal and vertical synchronization signals are each transmitted on its own color signal -- not  
13 the same color signal.

14  
15           At page 43, please replace the paragraph beginning at line 9 with the following amended  
16 paragraph:

17           If the keyboard and cursor control device signals comprise a signaling control signal, CIM  
18 CPU 406 causes signaling circuit 418 to emit an audible or visual signal. That is, CIM CPU 406  
19 contains all the required firmware to control signaling circuit 418. Preferably, as shown in FIG.  
20 ~~[[4A]]~~4B, signaling circuit 418 comprises amplification circuit 420, signaling 422, and ground  
21 423. A signaling circuit control signal received from CIM CPU 406 is transmitted to  
22 amplification circuit 420 where the signal is amplified utilizing a transistor amplification circuit

1 comprising resistors 424a, 424b and 424c, voltage source 426, and transistor 428. By utilizing  
2 proper combinations of resistances for resistors 424a, 424b, and 424c and voltage value for  
3 voltage source 426, the signaling circuit control signal achieves the desired amplification. The  
4 amplified control signal is then sent to signaling 422 which emits an audible or visual signal in  
5 response. Signaling circuit 418 is completed by ground connection 423.

6  
7 At page 45, please replace the paragraph beginning at line 16 with the following amended  
8 paragraph:

9 Conversely, keyboard and cursor control device signals received from the local user  
10 workstation through MSU 112 and cable 114 (FIG. 1) are received at port 402. ~~data packet~~  
11 ~~signals and transmits them to CIM CPU 406.~~ Alternatively, the received data packet signals may  
12 be de-serializes by a non-UART device. CIM CPU 406 uses the information contained in the  
13 data packet signals to emulate keyboard and mouse signals. These emulated signals are applied  
14 to keyboard port 414 and mouse port 416 through port 400 via cable ~~[[418]]~~419.

15  
16 At page 48, please replace the paragraph beginning at line 8 with the following amended  
17 paragraph:

18 Referring next to FIG. 6, disclosed is an alternate embodiment of the intelligent, modular  
19 computer management system of the present invention in which the system is expanded to  
20 include two MSUs 112, each having eight (8) inputs and thirty-two (32) outputs. This  
21 configuration allows sixteen (16) USTs 108 to access and operate thirty-two (32) remote  
22 computers 118. In this alternate embodiment, each UST 108 may be linked to either first MSU

650 or second MSU 651 via cable 110. All signals received at UST 108 are transmitted via its  
connected MSU (i.e., either first MSU [[701]]601 or second MSU [[702]]602) to CIM 116 that is  
connected to the desired remote computer 118. In this alternate embodiment, CIM 116 provides  
interfaces for two (2) single CAT 5 cables 114 to allow it to connect to both first MSU  
[[650]]601 and second MSU [[651]]602. Thus, CIM 116 allows sixteen (16) user workstations  
100 to operate thirty-two (32) remote computers 118. In addition, this embodiment allows two  
(2) user workstations 100 to simultaneously access and operate the same remote computer 118.  
Alternatively, this embodiment allows a first user workstation 100 to inform a second user  
workstation 100 that a remote computer 118 is in use and, therefore, access to it is restricted.